

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/089,363	KREINER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eric F Winakur	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>3/25/02</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                              | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Faber on 30 April 2004.

The application has been amended as follows:

1. A device for measuring physical quantities in the eye, with a foldable implant on which, arranged outside an implant part covering the field of vision the eye, there is a telemetry device having a sensor and having a transmitter device with coil for wireless transmission of information corresponding to the sensor signals, and with a receiver device which is arranged outside the eye receives the information sent by the transmitter device, and with an evaluation device which converts the received information into reproducible data, characterized in ~~that~~ by further comprising an arrangement comprising, on an annular foldable support (2;16), the coil (4) is arranged in the form of a plurality of adjacent coil windings in at least one surface, and at least one electronic module (4) containing the electronics of the telemetry device is electrically contacted with the coil, and in that ~~this~~ the arrangement is embedded in the foldable biocompatible implant material.

2. The device as claimed in claim 1, characterized in that the coil windings (3) are formed from planar electrical conductor tracks.

3. The device as claimed in claim 1, characterized in that the coil windings (3) are arranged in one or more planes.

4. The device as claimed in claim 1, characterized in that the sensor (5) is covered completely or partially by a transmission medium transmitting the physical quantity.

5. The device as claimed in claim 4 4, characterized in that the biocompatible material with which the device is covered forms the transmission medium.

6. The device as claimed in claim 1, characterized in that the coil windings (3) in the area of their connection to the electronic module (4) extend in a substantially rectilinear manner.

7. The device as claimed in claim 1, characterized in that the coil windings (3) extend substantially in the entire implant part lying outside the field of vision of the eye.

8. The device as claimed in claim 1, characterized in that the sensor (5) is designed as a pressure sensor.

9. The device as claimed in claim 8, characterized in that the pressure sensor (5) continuously measures the intraocular pressure, and the electronics of the telemetry device have a memory in which the sensor signals are stored for a temporally limited transmission to a receiver device.

10. The device as claimed in claim 1, characterized in that the sensor (5) lies outside the field of vision of the eye in an area which does not overlap the surface of the coil windings (3).

11. The device as claimed in claim 1, characterized in that the sensor (5) lies inside the ring formed by the coil (4).

12. The device as claimed in claim 1, characterized in that the implant (6) is designed as an intraocular lens, and in that the annular support (2) in the area of the optic lens part (8) has a cutout which lies inside the coil windings (3).

13. The device as claimed in claim 1, characterized in that oblong holes (9) are formed in the implant material between the coil (4) and the implant part lying in the field of vision, ~~in particular the optic lens part (8) of the intraocular lens.~~

15. The device as claimed in claim 1, characterized in that the at least one surface ~~or surfaces~~ in which the coil (4) is arranged extends ~~or extend~~ approximately perpendicular to the an optic axis (10) of the implant (6) ~~designed as an intraocular lens.~~

16. The device as claimed in claim 1, characterized in that the coil (4) is arranged on one surface and the electronic module (4) on the other surface of the annular support (2; 16).

17. The device as claimed in claim 1, characterized by an annular implant body (46) made of at least partially flexible material which forms the support for the coil (4).

18. The device as claimed in claim 17, characterized in that the annular implant body (46) can be fixed in the sulcus of the eye.

2. The following is an examiner's statement of reasons for allowance: Applicant cites several references. Of particular relevance, DE 197 28 069 teaches a device for measuring intraocular pressure that includes sensor elements, a coil, and a transmitter

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arranged on an intraocular lens outside of the field of vision of the lens. However, only a single coil is disclosed and while the document discloses that these elements can be encapsulated on the intraocular lens, there is no teaching or suggestion of arranging the coil and transmitter on a foldable support, with the entire arrangement being embedded in the biocompatible implant material. Applicant further cites Frenkel which discloses an alternate intraocular lens pressure monitoring device, which also does not teach or suggest the claimed structure of a coil and electronic module arranged on an annular foldable support, wherein the arrangement is embedded in a foldable biocompatible implant material.

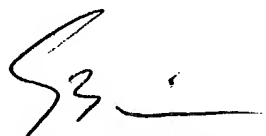
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric F Winakur whose telephone number is 703/308-3940. The examiner can normally be reached on M-Th, 7:30-5; alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mary Beth Jones can be reached on 703/308-3400. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric F Winakur  
Primary Examiner  
Art Unit 3736

30 April 2004